



CASSIDIAN

Full-Circle Security and Communications

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Chief Operating Officer

Cassidian Communications, an EADS North America Company

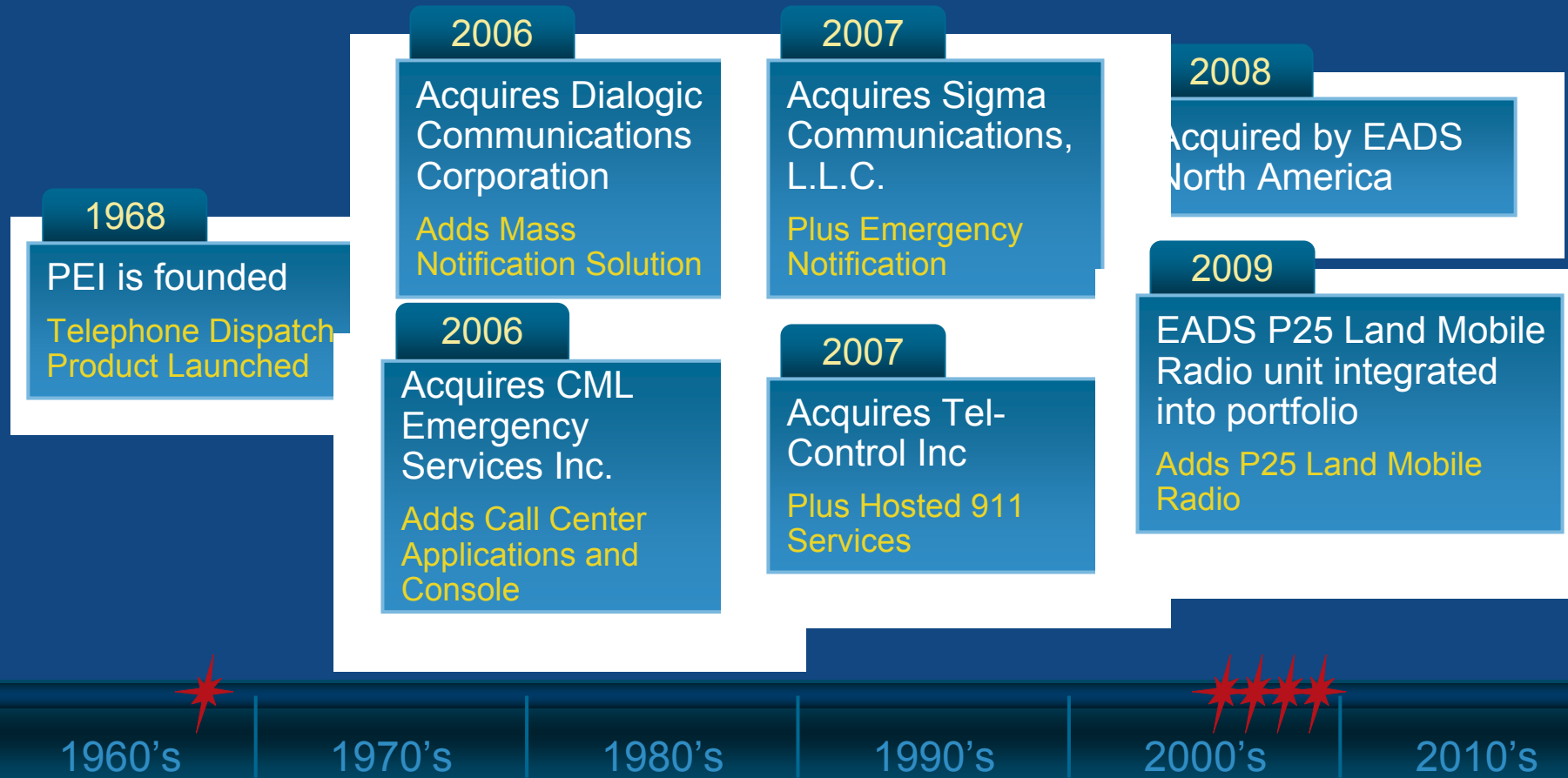
March 31, 2011

Agenda

- Corporate Background
- Full Circle Security Communications, by Line of Business
 - E9-1-1 Call Center Applications
 - Land Mobile Radio and Long Term Evolution (LTE)
 - Notification Solutions and Services
- A look toward the future
- Working together to accelerate advanced communication solutions

Cassidian Communications (formerly PlantCML)

Building an Industry Leader



... and making it stronger in 2011

Leading Together

Cassidian Communications Market Leadership and EADS Resources

EADS Corporate Organization

AIRBUS
AIRBUS MILITARY



EUROCOPTER



EADS
ASTRIUM



CASSIDIAN



Cassidian is part
of **EADS**, a global
company with
2009 revenues of
\$60B USD

**CASSIDIAN
SYSTEMS**

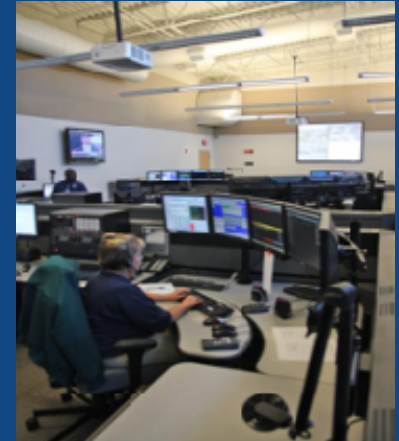
**Cassidian
Communications**



Our Strength

A pioneer and established leader in crisis communication, digital land mobile radio and notification solutions

- Extensive experience delivering comprehensive communication solutions to public and private operations globally
- Expansive and growing customer base serving over 200 million US residents and tens of thousands of corporate users
- ISO 9001:2008 certified organization



Experience, Dedication and Innovation

Our Leadership

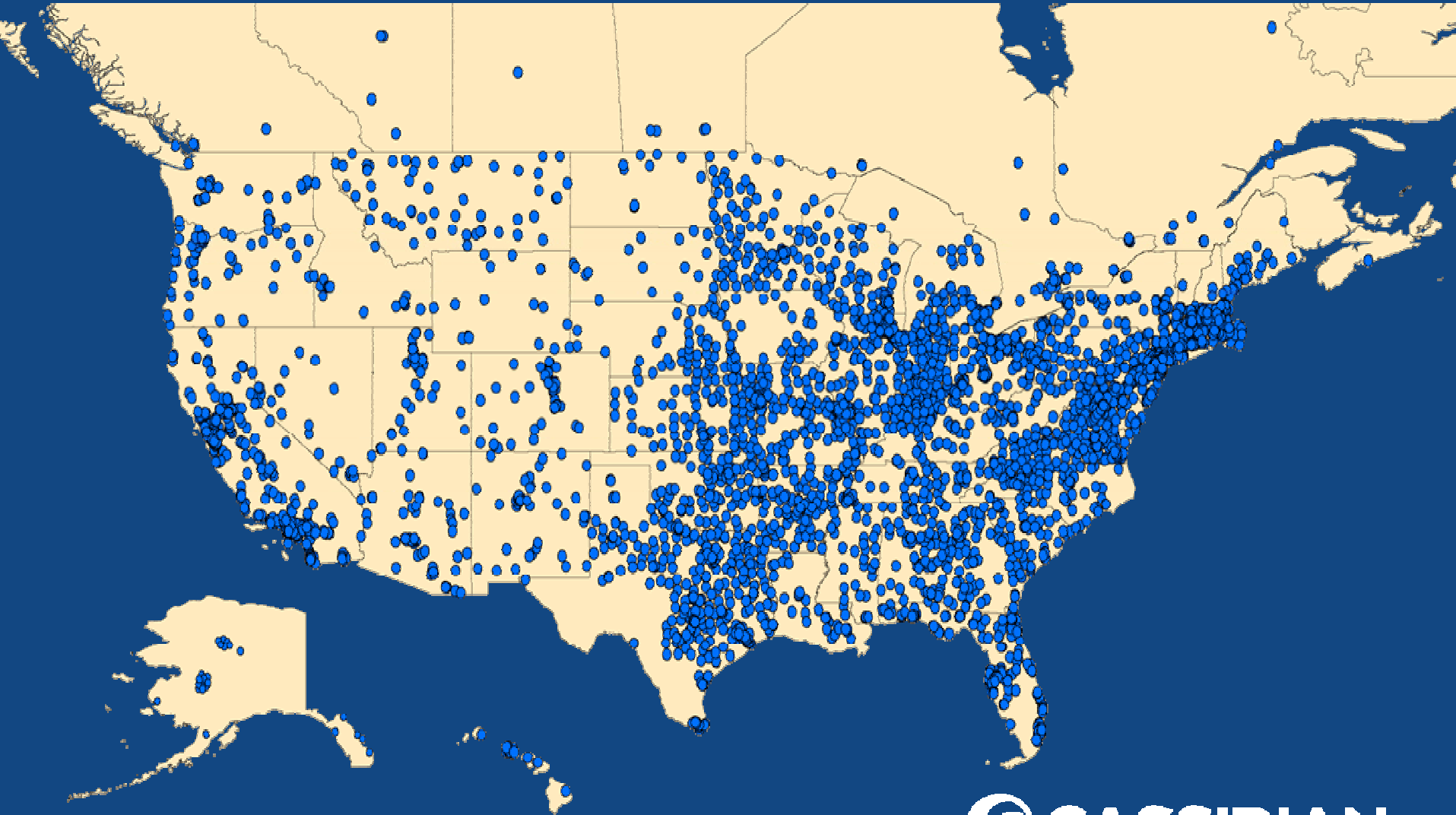
- Over 3700 9-1-1 Call Center solutions deployed - 27 of the 30 most populous US cities and over 50 US military operations
- 1000+ Notification systems providing notifications to people in over 100 countries, as well as to corporations in over 20 different industries
- Digital trunked radio systems deployed in over 200 public safety networks in 68 countries



Largest provider of mission critical networks in North America and globally

Our Solutions Help Protect Over 200 Million People in North America...

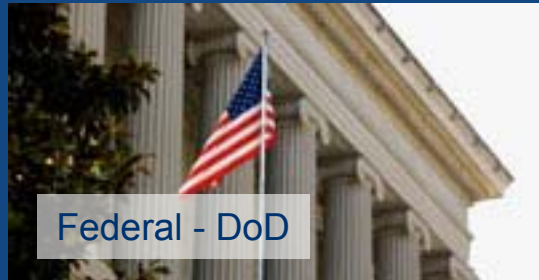
DEFENDING WORLD SECURITY



Cassidian Communications, Inc.

Our Markets

DEFENDING WORLD SECURITY



Solutions deployed globally for public safety, federal and corporate customers

Full-Circle Security and Communications from Cassidian Communications

DEFENDING WORLD SECURITY



Our Vision

Lead as a Global provider of Full Circle Security

Population

Emergency Call
Taking



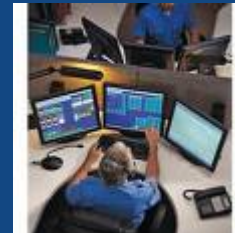
Mapped
location of call



Resource
management
(CAD)*



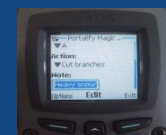
Operator
Desktop



Radio console



LMR /
Broadband
Network



Terminals*

Emergency Notification
("Reverse '9-1-1")



9-1-1 call stats



Incident stats
(RMS)*



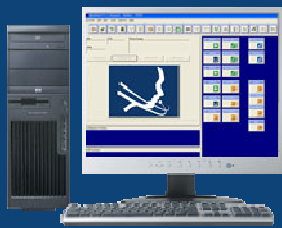
Full-Circle Security in Action

DEFENDING WORLD SECURITY

"911 – what is your emergency?"

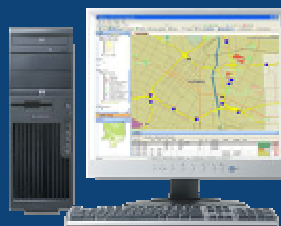


VESTA



Sentinel

"There's a man with a gun at the Quik Stop Mini-Mart on Elm!"



ORION Vela



ORION ARIES



NightHawk Mobile

"Unit 134, armed robbery in progress at the Quik Stop Mini-Mart located at 246 Elm Street."



Aurora Information Management

"We have a call spike – tell the first shift to plan on overtime."



GeoCast Web

"This is a notification message from the police department: Armed suspects in the area – please initiate lockdown process"



COR^{P25} Basestation

"Dispatch, pursuing suspects on foot – warn public facilities in the area."



COR^{P25} Universal & Trunking Site Controllers

Cassidian Communications Portfolio: Call Center Applications (CCA) Line of Business

DEFENDING WORLD SECURITY

- Monitoring & Response
- Virus Protection
- Patch Management
- Disaster Recovery

- VESTA®
- Sentinel®

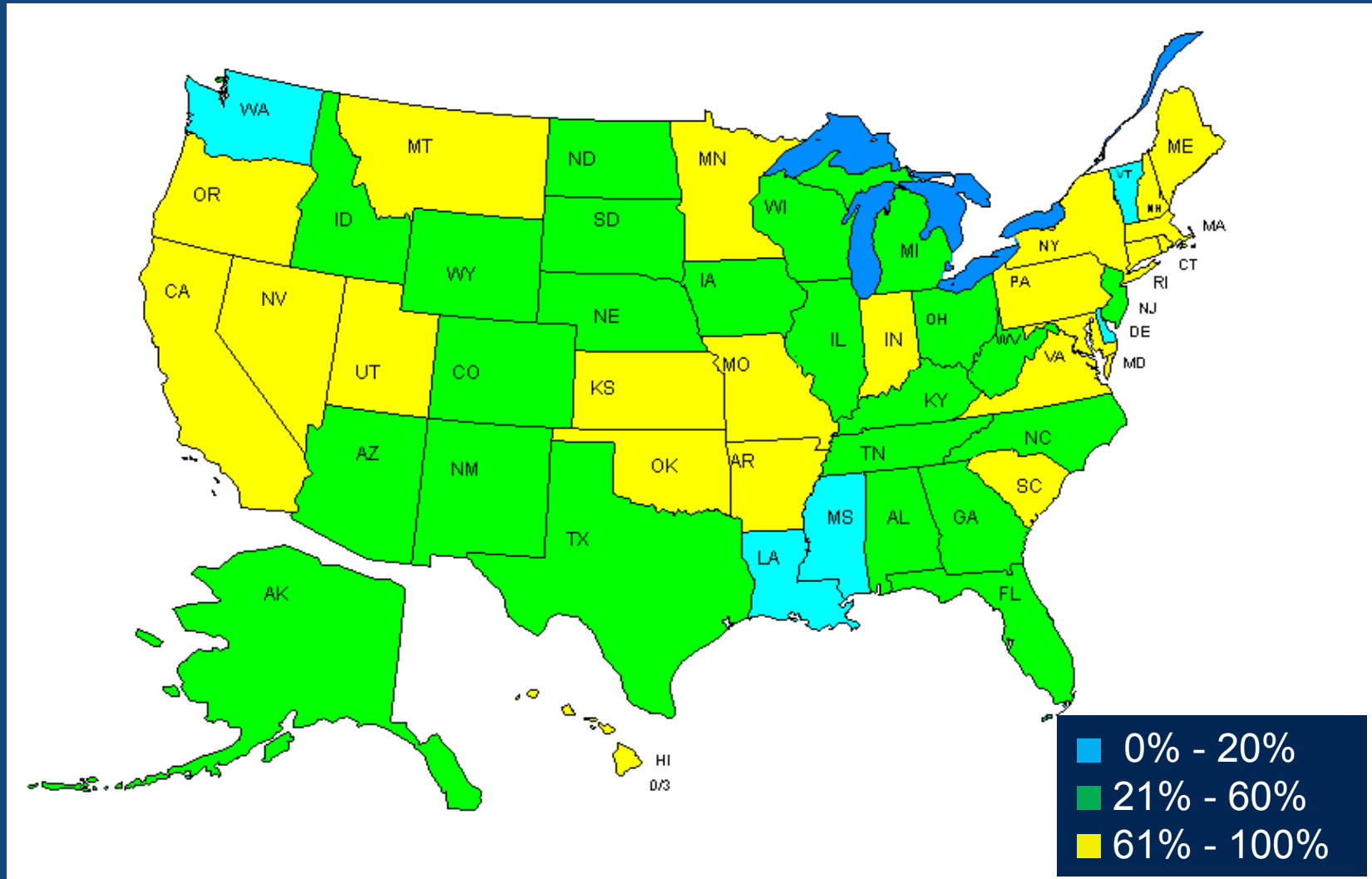
- ORION™
Mapstar™
- ORION™ Vela®

- ORION™ ARIES®

- Aurora™



Cassidian Communications - US PSAP Market Share



Integrated, end-to-end Solution

*Robust, geo-diverse,
survivable solutions*

*Full range of scalable
communications
switches*

Managed Services

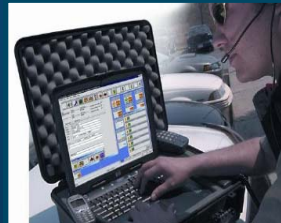


**Virus Protection
Disaster Recovery**

**Patch Management
Monitoring & Response**



**Sophisticated
Location
Mapping**



**Flexible
Remote
Provisioning**



**Advanced
IP Call
Processing**



**Unified
Information
Management**

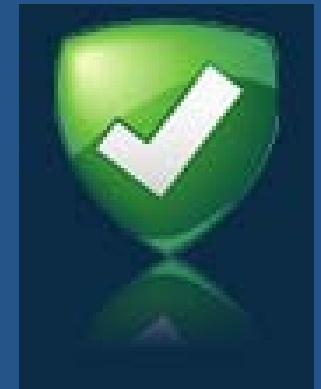


**Integrated
Mobile
Dispatch**



**Computer
Aided
Dispatch**

Managed Services Secure Facilities



Service Management Center (SMC)

- State of the art technical facility staffed at all times
- Mirrored sites in California and Tennessee
- Biometric access controls protect sensitive data
- Secure high-speed connections to firewalled customer installations

Enhanced monitored system protection for peace of mind

Managed Services

Detect potential problems before they impact service

24x7x365
MONITORING
& RESPONSE

Monitoring & Response

- Proactive remote monitoring of key systems to help avert a failure combined with a comprehensive response plan should a failure become inevitable

Patch Management

- Automatic deployment of pre-tested, certified operating system patch updates

Virus Protection

- Automatic distribution of anti-virus definition updates for detection and removal viruses, Trojan horses, worms, and dangerous spyware

Disaster Recovery

- Automatic data backups and real-time snapshots of remotely monitored systems quickly restore operations upon externally-caused catastrophic failure

Maximize system uptime and recovery from interruptions

Cassidian Communications Portfolio:

Land Mobile Radio (LMR) and Long Term Evolution (LTE) Line of Business

DEFENDING WORLD SECURITY



- Universal System Controller
- Trunking Site Controller
- Digital Base Station
- Network Management System
- LTE Solutions



Leading the Advancement in Digital Trunked LMR Technology

DEFENDING WORLD SECURITY

Standards Leadership

- Leading P25 standards process since 1999
 - Current Vice-chair of Two-Slot TDMA Standards Committee
- 2010 advancements - TDMA Phase 2 Core standard, as well as ISSI test standards for Conformance, Interoperability, and Compliance Assessment

Technology Leadership

- Only vendor to deploy systems based on all 3 digital trunked LMR standards – TETRA, TETRAPOL and P25
- Deployed industry's first digital trunked LMR network – ACROPOL in 1996
- Led industry evolution to distributed architecture with first IP core deployed in 2005
- Leading design of public safety grade broadband applications and devices, such as LTE vehicle modem



The World Relies on Cassidian for Mission Critical Communications

"Le Havre" harbour, France
 41ème RT Joint Purple Regiment, France
 A.S.T.R.I.D., Belgium
 Abu Dhabi Police
 ACROPOL, Police forces, France
 ADP, France
 Airbus Plant, Toulouse, France
 Airbus Hamburg
 ALIANZ, Frankfurt, Germany
 AUDI, Ingolstadt plant network, Germany
 Authority network, Kuwait
 Authority network, Singapore
 Barrick Gold Corporation, Argentina
 Beijing authority network, China
 Berliner Verkehrsbetriebe (BVG), Germany
 BMW Munich plant, Germany
 BMW R
 Border
 Bulgaria
 Bundes
 BVG, E
 Canar
 Castill
 Chesh
 China
 CISEN
 Coast Guard Taiwan
 Corus, Industrial Plant, Netherlands
 Defence Forces of Finland/UN Kosovo
 Drujba-Gomel Gazoduc, Belarus
 DSM, Chemical Plant, Netherlands
 Dubai government
 Emergency services, Martinique
 EUROKAI, Hamburg harbour, Germany
 European Central Bank, Germany
 European Commission, Belgium
 FAG, Frankfurt airport, Germany
 Fire Brigade, Military Base, UK
 Friedrichshafen city, Germany
 Frontier Guard, Romania
 Garda Dublin, Ireland

German Chancellery
 German Parliament
 Greece OSDTR public safety, Greece
 Guangzhou metro, China
 Guardia Civil Protection, Spain
 HEAG Verkehrs-GmbH of Darmstadt, Germany
 Helsinki Energy Company, Finland
 Hochbahn, Metro of Hamburg, Germany
 Hong Kong Fire Services, China
 Hong Kong Police Forces, China
 IRIS Police, national police, Mexico
 Italian Projected Forces, MoD, Italy
 Jinan Airport
 Kölner Verkehrs-Betriebe AG (KVB), Germany
 Lyon Police, France
 MAN Munich plant site, Germany

Police Academy, Poland
 POLYCOM, Switzerland
 Projected Forces, MoD UK
 Quito, Emergency Services, Ecuador
 Radiotel, TETRARUS, Russia
 RAKEL, Sweden
 RATP, France
 RENABEC Projected Forces, French army
 Rheinbraun, mining company, Germany
 Rhineland-Palatinate motorway, Germany
 Royal police, Bangkok city network, Thailand
 RUBIS, Gendarmerie, French
 SERVIR network, French Air Force
 Shenzhen Metro Company, China
 SIRDEE, Guardia Civil national, Spain
 SNCF French railways, IRIS, France

Over 200 Systems in 68 Countries 45 Nationwide Public Safety Networks

NATO, Generali Airport
 NATO, ISAF, Afghanistan
 NEXUS, Catalonia, Spain
 Ningqi Railway Company, China
 NTC-RCS Military training Center, US
 Office National de la Télédiffusion (ONT), Tunis
 OPERA Network, French navy
 OTAN, Kosovo
 Pan American Energy, Argentina
 Paris Rhin Rhône (SAPRR), France
 PEGAS, MoI, Czech
 Peugeot, Car Manufacturer Plant, France
 Peugeot, Nigeria
 PHOENIX, security Forces, Romania

TETRA Iceland
 The royal Mint, Industrial Plant UK
 Tianjin Public Security, China
 Tianjin Water, China
 Tomskneft, Russia
 Tradia, Catalonia region, Spain
 TRANSPOL, Lille buses, France
 Turin Municipality
 UNITED NATIONS, Kosovo
 UTA, airforce, Germany
 VERSAILLES castle
 VIRVE, Finland
 Well.COM, Burgenland
 Zurich Airport

Cassidian Communications Portfolio

Notification Solutions and Services (NSS) Line of Business



- The Communicator!® NXT™
- GeoCast® Web™
- REVERSE 911®
- NetNotify™
- MassCall®

Cassidian Communications

Proud Legacy of NSS Implementations (sample list below).....

Federal

- White House
- US Senate
- US House of Representatives
- DOJ
- DOT
- FBI
- NRC
- CDC
- IRS
- FAA
- NASA
- FEMA
- 240+ global military sites

Civilian

- Sempra Energy
- Royal Bank of Scotland
- Eli Lilly
- Citigroup
- American Airlines
- HCA (Hospital Corporation of America)
- Continental Airlines
- Boeing
- BP
- State Farm
- SunTrust
- JP Morgan Chase

Public Safety

- Los Angeles Fire Department (CA)
- New York City Department of Health (NY)
- Arizona Division of Emergency Management
- Santa Barbara County Sheriff's Department (CA)
- Over 400 other agencies

Cassidian Communications Technology

Highlights – Notification Solutions and Services (NSS)

Flexible

- List-, map-, and desktop-based notification
- Multi-device, two-way communication
- On-site, hosted and/or hybrid (combined) deployments

Secure

- JITC-certified and NIST-compliant
- Vulnerability assessments using commercial tools

Integrated

- Global Alert Link
- WebEOC
- eBRP
- ESRI
- API integrators with dozens of other applications

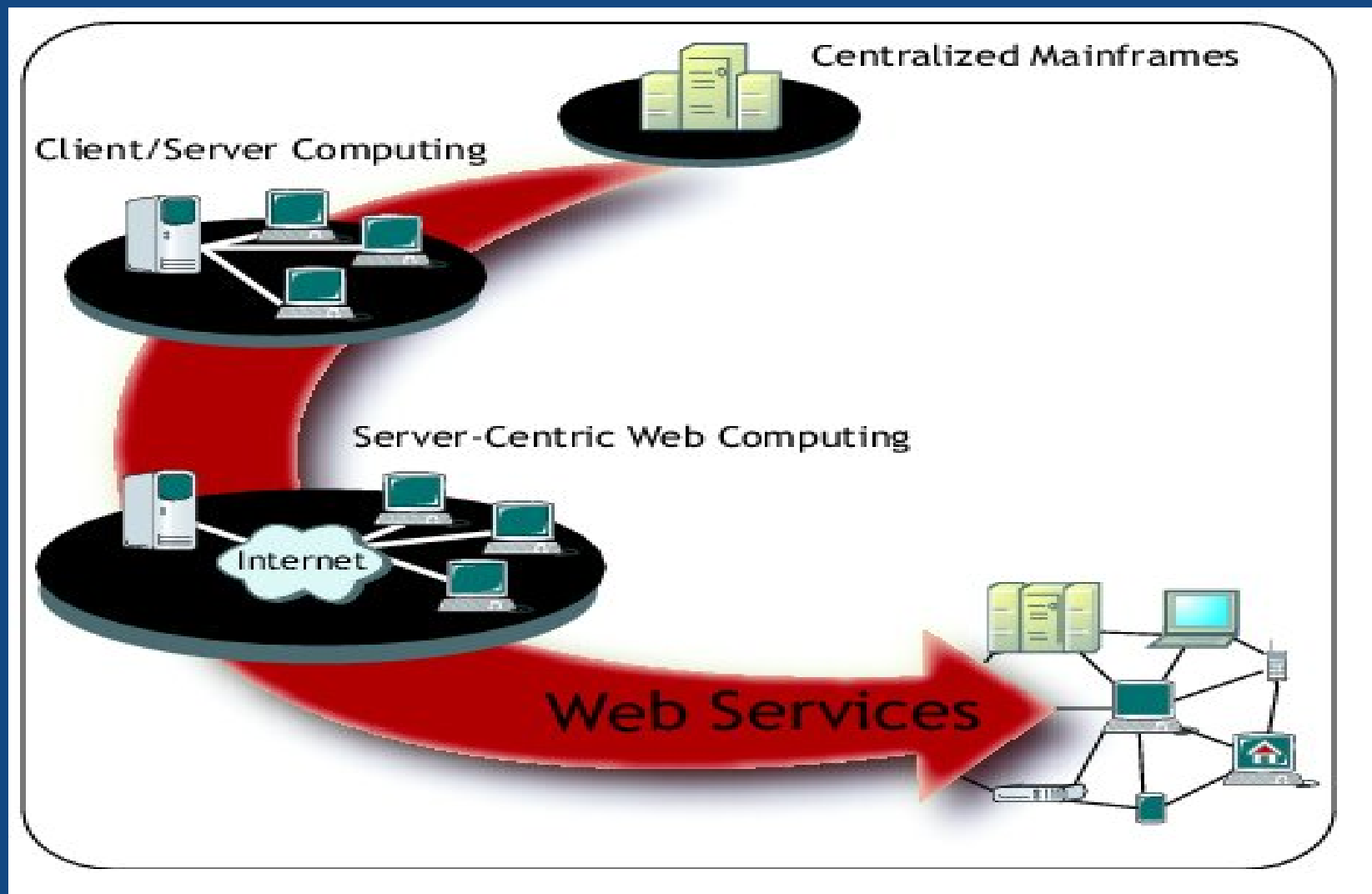
Experienced

- 27 Years providing notification solutions
- First-class customer training and 24/7 technical support

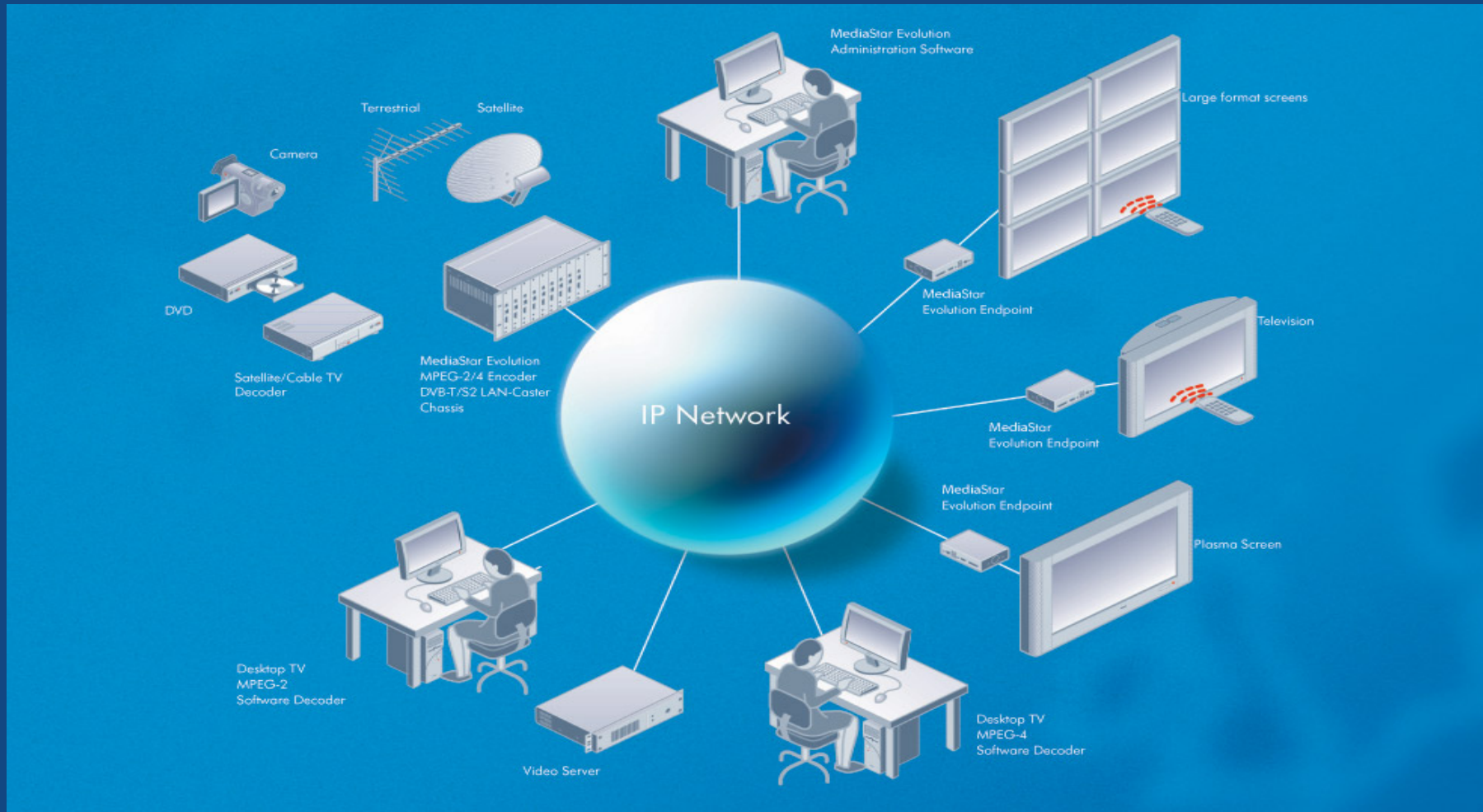


A look toward the future....

DEFENDING WORLD SECURITY



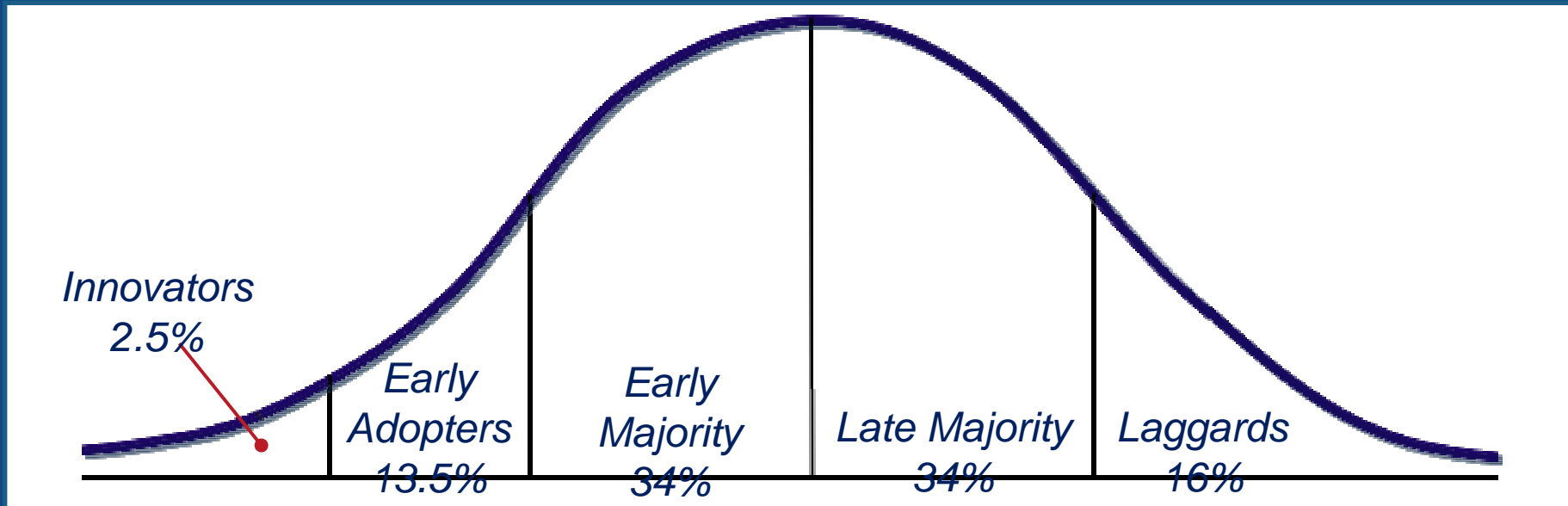
Digital Communication (Voice/Data) Evolution



Technology...The IP Adoption Curve

IP on the LAN – mainstream acceptance.....

The Public Safety industry has reached “critical mass” in terms of IP adoption

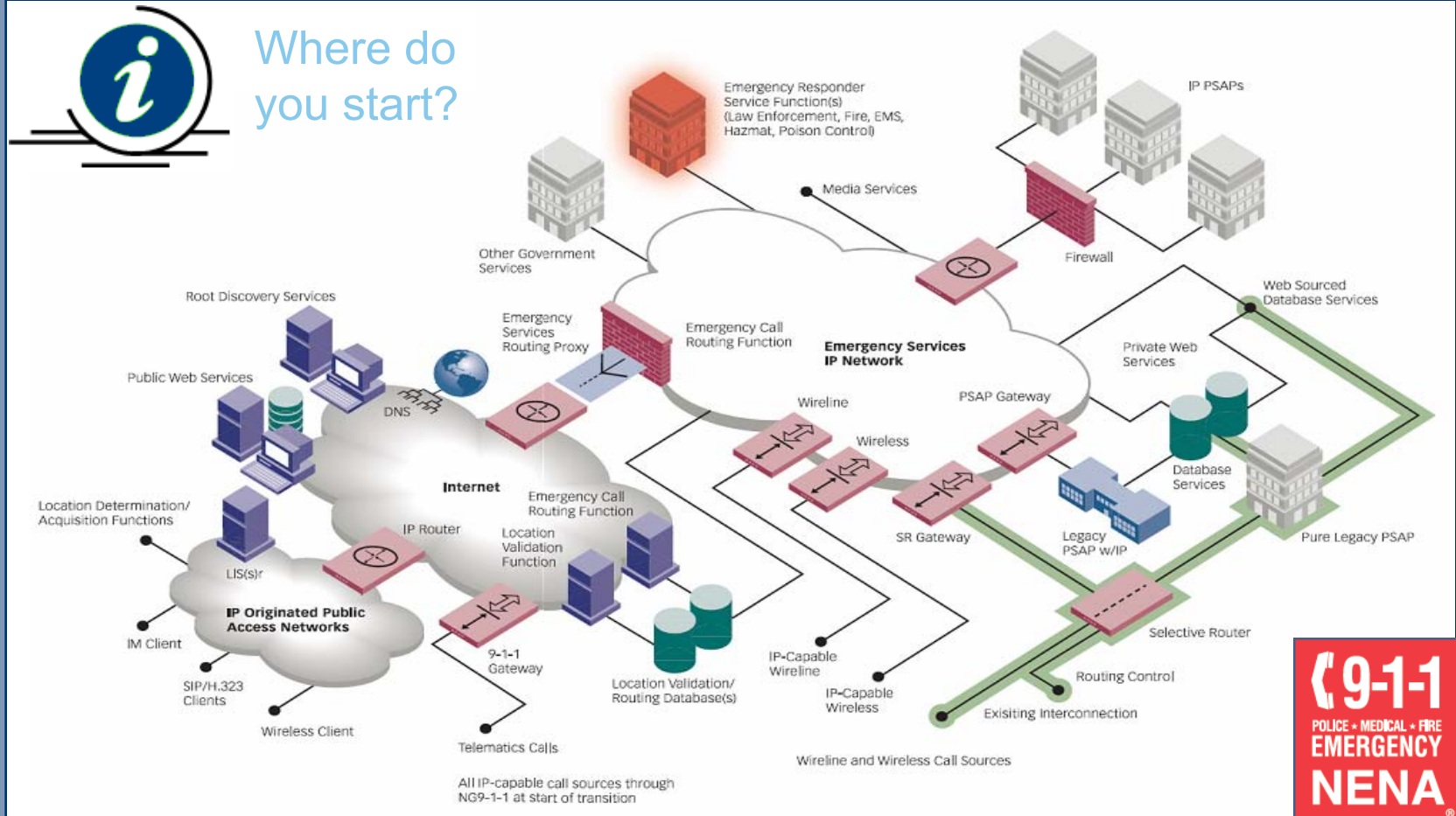


.....IP on the WAN (ESINets and beyond):

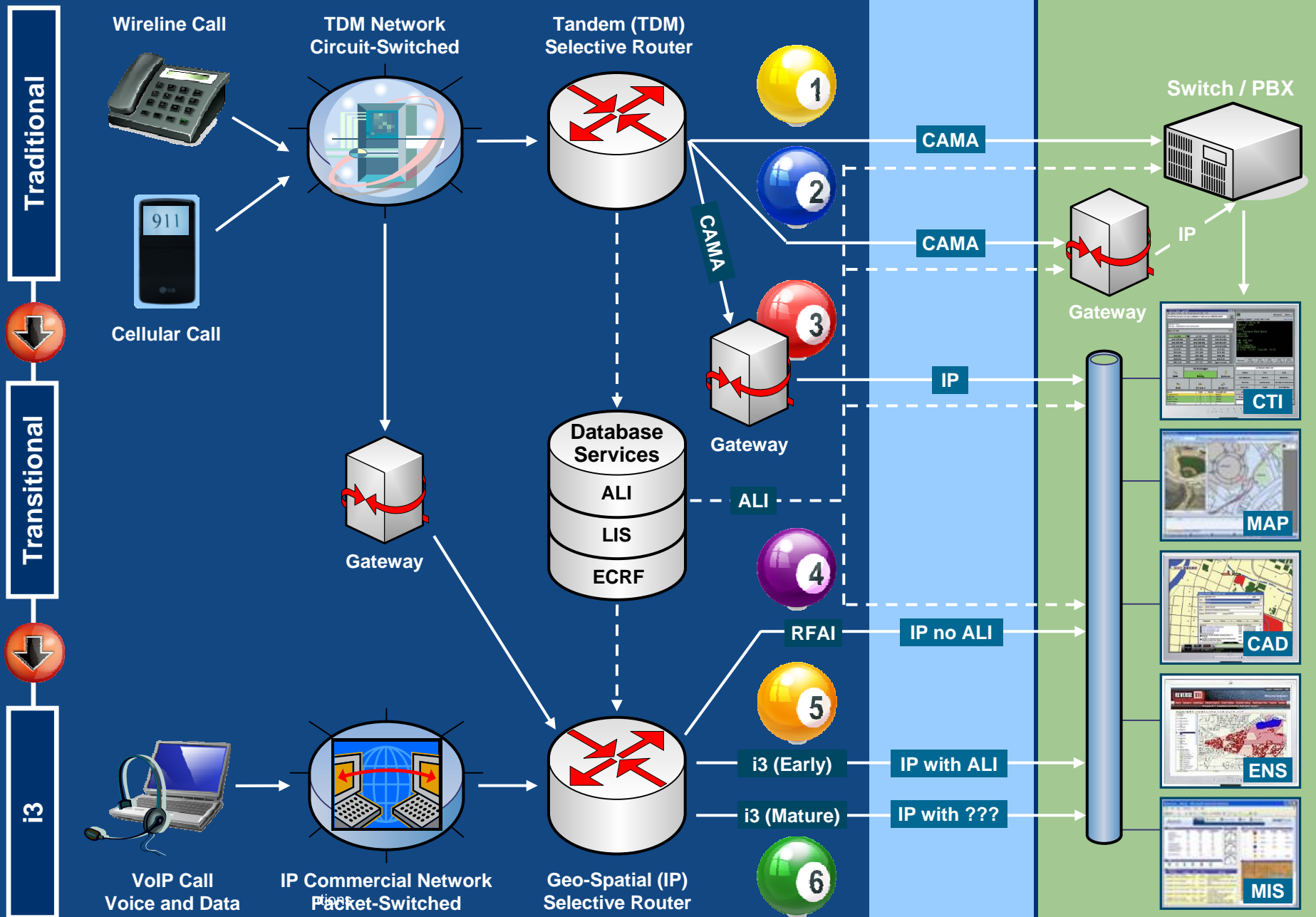
Gaining momentum, but needs a “push” to get up and over the top...
macro economics is helping and hurting the speed of adoption...

Sustained effort is needed to “cross the adoption chasm”

NENA i3 NG9-1-1 Blueprint



i3 Transitional Evolution



Today

– Emerging IP –

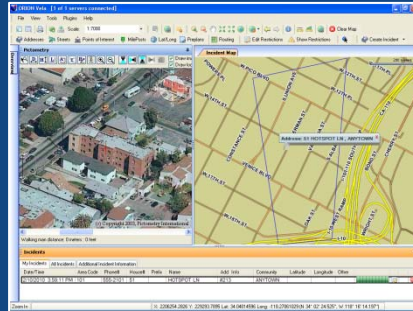
Integrated Communication

Application Specialization

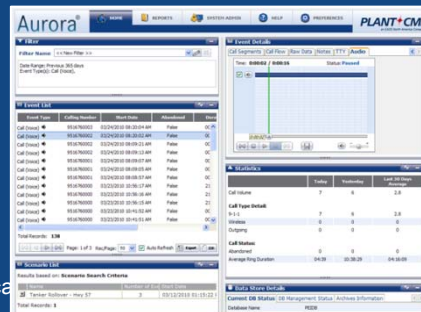
Call Taking



GIS



MIS



Tomorrow

– Core IP –

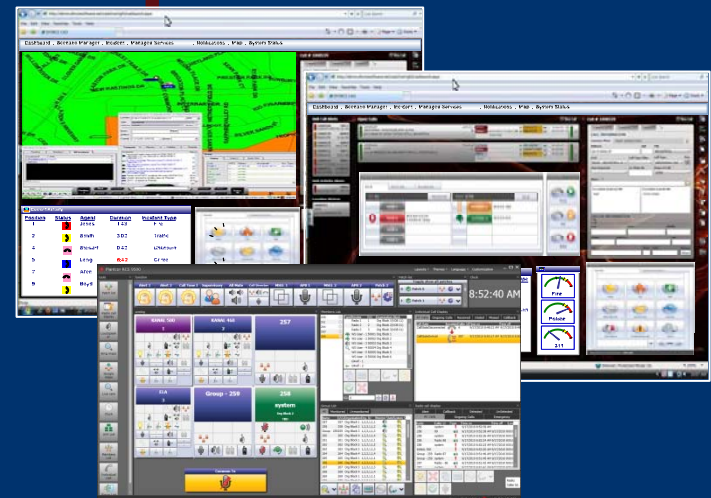
Common Design

Data Convergence

Unified Communications

Real-Time Data

Managed IP Backbone



Role-Based Configuration

Land Mobile Radio

P25 LMR & LTE Address New Mission Critical Communication Needs

P25 LMR

- Two-way voice and narrowband services
 - Unique features required by Public Safety
 - Wide geographic coverage and high reliability
 - Encryption and over-the-air re-keying
 - Wide variety of frequency bands
 - Communicate with legacy networks

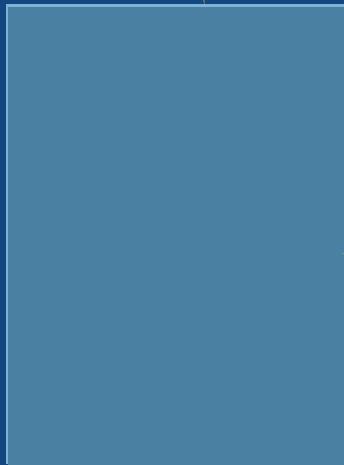
Long Term Evolution (LTE)

- Supplement mission critical LMR services with enhanced multimedia applications
 - Anytime, anywhere broadband access
 - High bandwidth information such as video, high-resolution imagery, and telemetry
- Push-to-Talk (PTT) between LTE and LMR networks for non-mission critical communications

Both P25 LMR & LTE Enable
Network Interoperability/Roaming

Interoperable Communications

Mission Critical



Non-Mission Critical



Enhanced Situational Awareness

In the Command Center

In the Field



Increased Operational Efficiency in the Field

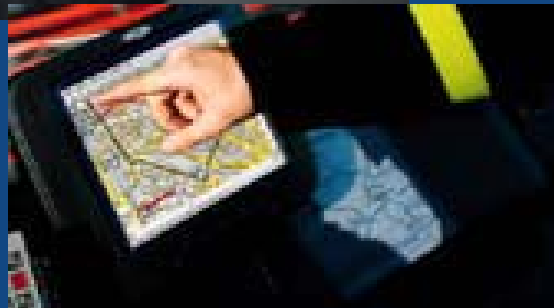
Database Queries



Mobile Command Center



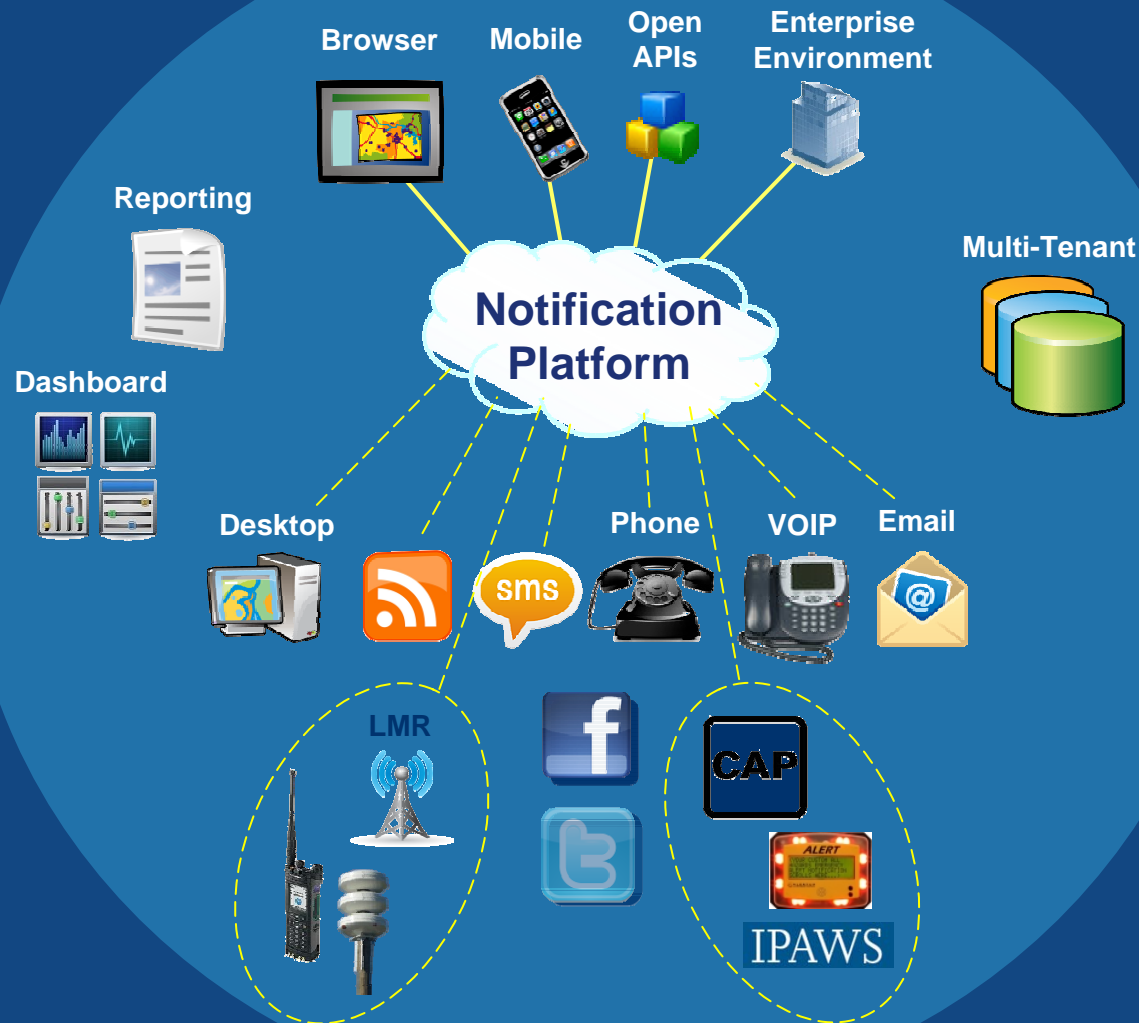
Geo-location
Apps



e-Ticketing



Cassidian Communications Notification Technology Platform



- High performance
- Flexible security
- Data segregation
- Auditing
- Many modalities

Cassidian Communications Full-Circle Security and Communications

Complete portfolio

- E9-1-1 Call Center Applications
- Notification Solutions and Services
- P25 Land Mobile Radio and Broadband (LTE)

Convergence

- Integration of solutions (common GIS technology)
- Interoperability
- Faster, more coordinated response
- A common operational picture
- Improved reporting



Working together to accelerate advanced communication solutions

- Ongoing engagement with FCC proceedings and committees (including working groups)
- Support legislative initiatives to implement FCC agenda
- Other items.....?

Thank You!

